2.0.3 DOCUMENTATION

2.0.3.1 GENERAL INFORMATION

Documenting analyzer maintenance, analyzer operational checks, calibration dates, and other activities which may affect the data quality are important facets of an operator's job. Two documents are used by the station operator to assist in the documentation: a station log and equipment relocation notifications. A brief summary of the use of these documents follows.

2.0.3.2 STATION LOG

A monitoring station log book must be maintained at each monitoring site. Conditions which may influence the data must be recorded in the log book. Some examples are: nearby construction, abnormal traffic patterns, or alterations to the sampling train (probe or equipment change). A current copy of the sampling site report should be contained in the station records. The site report must be kept up-to-date. Any time a parameter (instrument, site location, probe, etc.) is modified or changed the site report should be revised and a copy forwarded to the immediate supervisor. An example of a completed site report is attached to this section (Figures 2.0.3.la, 2.0.3.lb, 2.0.3.1c, 2.0.3.1d.). The station log also serves as a permanent record of the acceptance test, routine maintenance, repairs, and calibrations performed on an instrument and travels with that instrument at all times. All routine maintenance, repairs, calibrations, installation dates, or other pertinent information should be logged and dated as they occur. Thus, the station log serves as a permanent record of instrument performance.

2.0.3.3 EQUIPMENT RELOCATION NOTIFICATION

In general, equipment relocation notifications (ERNs) are required when equipment having an ARB property number (e.g. analyzer) or related equipment (printed circuit board, vacuum pump, source lamp) are relocated or repaired. In addition, an ERN is required when a compressed hydrogen gas cylinder is relocated. For other compressed gases, see Section 2.0.3.5.

The ERN contains spaces for original location, destination, station numbers, ARB numbers, parent ARB numbers, instrument description, manufacturer and model number, parameter, serial numbers, repair information, job number, and comments.

The extra “Station No./Date” block in the “Destination” row of the ERN is used to enter interim station location information. Before the equipment is shipped from the lab in Sacramento, the station number of the destination will be entered in the leftmost “Station No.” block and the white original removed. If the equipment is shipped to an interim location and field air monitoring personnel move it again to its final location, the field personnel involved will enter the final destination station number and date in the right "Station No." block and send the yellow copy to the lab for processing without filling out a second tag. When lab personnel receive the yellow copy, the new location information will be entered into the computer.

The "Job No." block will be used for Instrumentation Sub-Section internal workload control, and the "Repair Information" block will be completed by laboratory personnel when necessary.

When completing an ERN for an instrument or component part being sent to the Lab for repair, please describe the malfunction in as much detail as possible in the “Comments" section of the tag. A complete description of the malfunction will help Instrumentation Laboratory staff to duplicate and repair the malfunction.

Attach the complete ERN, with all copies and the original, to the component part or instrument to be shipped so Instrumentation Laboratory personnel can process the entire tag. The original will be left on the unit for the repair technician who needs the legible original of the description of the malfunction, and the yellow copy will be used to enter the location information into the computer.

Filling out ERNs completely and accurately whenever equipment is moved is very important, because it provides information as to the location of valuable ARB property and provides a detailed description of any malfunctions or operational characteristics of the equipment being shipped.

1. Relocation of Major Assemblies - Whenever equipment with an ARB-assigned property number is relocated, an ERN must be completed. This includes relocating instruments between air monitoring stations, between the shop and air monitoring stations, and between the ARB and instrument vendors. Multi-module instruments which have separate ARB numbers require separate ERNs. Figure 2.0.3.2 is an example of a properly completed ERN for a major assembly.

2. Relocation of Components or Sub-assemblies - The procedure for completing an ERN for relocation of components or subassemblies is identical to that for major assemblies, with one exception. The lone exception is that the ARB property of the major assembly in which the component or subassembly will be used must be entered in the block labeled "Parent ARB No.". The "Parent ARB No." must be specified when requesting components or sub-assemblies from the shop. Clearly indicate in the "Comments" section the reason for returning any component or sub-assembly to the shop. Figure 2.0.3.3 is an example of a properly completed ERN for a subassembly.

3. Routing of Equipment Relocation Notifications - The hard copy of the ERN must accompany the item being relocated. The three soft copies of the ERN should be routed to the Air Quality Monitoring Support Section in Sacramento, according to the procedure delineated by the supervisor of the respective units. The ERN's are screened for correctness, and then forwarded for inclusion in the station files (white copy), instrument files (yellow copy), and the ARB property records (pink copy).

2.0.3.4 SITE IDENTIFICATION REPORT

INSTRUCTIONS FOR COMPLETING THE SITE IDENTIFICATION REPORT

This report should be submitted to the Air Resources Board (ARB) whenever a new site is established or when any parameter contained in the report is changed or modified.

When submitting changes for existing sites, only the "Site Name" and "Site Number", as assigned by the ARB, need be entered. Any other information entered on the form should only be those items that have changed. Each time a new report is submitted, include an 8-1/2" x 11" section of a U.S. Geographical Survey (or local street) map indicating the site location and photographs of the four quadrants surrounding the site (indicate the quadrant on the photograph).

Tables and additional guidelines for coding and submitting air quality data to the ARB's Aerometric Data System can be found in the ARB publication "User's Manual: California Aerometric Data System".

The following are guidelines for filling in the requested information:

HEADING:

In the space provided on the top of the report, enter your name and the date. Indicate by an "X" in the appropriate block whether this report is a new submission or a revision to a previously submitted Site Identification Report.

SITE IDENTIFICATION:

Agency Responsible for Site - Enter the name of the agency responsible for maintenance, rental and equipment at the site.

Site Location - Enter the names of the air basin and county in which the site is located.

Geographical Coordinates - Enter either the longitude and latitude or the UTM (Universal Mercator) coordinates.

Longitude - Enter degrees, minutes and seconds of longitude for this site as indicated. Make no entry if UTM system for site location is used.

Latitude - Enter degrees, minutes and seconds of latitude for this site as indicated. Make no entry if UTM system for site location is used.

UTM Z one - Enter the two-digit UTM zone code.

Easting Coordinate - Enter the easting UTM coordinate for this site (in meters) from the appropriate section of a UTM map. This entry must be right justified with leading zeros* and should be accurate to the nearest meter. UTM coordinates are automatically calculated if longitude and latitude have been entered.

Northing Coordinate - Enter the northing UTM coordinate for this site (in meters) from the appropriate section of a UTM map. This entry must be right justified with leading zeros* and should be accurate to the nearest meter.

*If less than five digits enter the values in the rightmost boxes, filling the remaining boxes with zeros.

SITE DESCRIPTION:

Location - Enter an “X” in the box that best describes the location of the site.

Dominating Influence - Enter an “X” in the box that best describes the dominating influence within a one-mile radius of samplers at the site.

Traffic Type - Enter an “X” in the box that best describes the predominant type of traffic around the site.

Estimated Traffic Volume - Enter the estimated traffic volume on the street nearest the site (vehicles per day) in boxes 20 through 26. This entry must be right justified with leading zeros*.

Estimated City Population - If the population of the area (city or town) in which the site is located is 2,500 or more, enter the estimated city population in boxes 27 through 34. This entry must be right justified with leading zeros*. If the site is located outside the jurisdictional limits of an area of this size, enter all zeroes in these boxes. If the population is less than 2,500, leave the boxes blank.

Temperature Controlled Area - Enter an “X” in the appropriate box in answer to the question: "Is the area where the instruments are located temperature controlled at 25 ^{o}C + /- 5^{o}C? "

Elevation of Site Instruments Above Ground - Enter the elevation (to the nearest tenth of a meter) of the site above ground level. The site is the area in which the air monitoring instruments are located. If the air monitoring instruments are not all located within a vertical distance of five meters of each other, enter a "9999" in the space provided. Then enter the respective elevation information in the "Comments" block. (For example, SO2 sampler at 20 meters, NO bubbler at 30 meters, etc.)

Elevation of Ground Above Mean Sea Level - Enter the ground elevation of the instruments to the nearest tenth of a meter above mean sea level following the same criteria as set forth above.

SITE LOCATION:

Site Address - Enter the full address of the site (number, street, city, and state). For areas that do not have a street address, enter a descriptive phrase such as the

name of a building or area that will adequately locate the site. Limit your entry to 37 characters using reasonable abbreviations if necessary (e.g. "Mt." for mountain, "Ct." for court, etc.).

Zip Code - Enter the five-digit postal zip code assigned to the geographical area in which the site is located. If necessary, refer to a copy of the National Zip Code Directory for the appropriate code.

COMMENTS:

Enter appropriate comments which could help characterize the site. Limit the combined total number of characters to 120. Applicable comments might be as follows:

Site within two blocks of heavy construction

Site on building adjacent to main street of town

Organization site code if different from ARB code

Names of other agencies whose samplers are at the site

2.0.3.5 INSTRUCTIONS FOR COMPLETING THE PROBE/SAMPLER IDENTIFICATION REPORT

This report must be submitted to the ARB: 1) whenever a new probe or individual sampler is installed; and 2) whenever the dimensions, materials, or the location of the probe or individual sampler changes. Physical replacement of a sampler does not require a new Probe/Sampler Identification Report, provided the physical dimensions, flowrate, and other pertinent characteristics of the probe are not changed.

When submitting changes to existing probes or sampler, only the “Site Name” and “Site Number”, as indicated on the initial report need be entered. Any other information entered on the report will be treated as changes to the originally submitted report.

Tables and additional guidelines for coding and submitting air quality data to the California Air Resources Board’s (ARB) Aerometric Data System can be found in the ARB publication “User’s Manual: California Aerometric Data System”.

HEADING:

In the space provided on the top of the report, enter your name and the date. Indicate by an "X" in the appropriate block whether this report is a new submittal or a revision to a previously submitted Probe/Sampler Report.

SITE IDENTIFICATION:

Site Name - Enter the ARB assigned site name as designated on the appropriate Site Identification Report, which is submitted for the site where the probe or sampler is located. The sampling site information must be exactly the same as that presented on the Site Identification Report.

Site Address - Enter the address of the site (number, street, city) as shown on the Site Identification Report submitted for the site where the probe or sampler is located.

Site Location - Enter the names of the Air Basin and county where the site is located.

PROBE/SAMPLER IDENTIFICATION:

Sampler Category - Enter an "X" in one box next to the category where the probe or sample is used.

Probe/Sampler Identification Code - Select a designation (01, AZ , 2B, etc.) which will uniquely identify the probe or sampler described on the form. The code must correspond to the code entered on the accompanying schematic diagram.** (See note below.) All subsequent references to this probe or sampler shall be by this code.

Operating Period - Enter <u>either</u> the initiation or termination date of probe or sampler operation at the site. If the probe or sampler is physically relocated within the site or established at the new site, the appropriate reports must be submitted, which terminate the operating period of the old probe or sampler and initiate the operating period of the new or relocated probe or sampler. A probe or sampler whose operating period has been terminated may be reinstated utilizing the "Probe/Sampler Identification Code" previously assigned. However, the physical characteristics of the probe or sampler, designated when the code was originally assigned, must be the same. The entries must be right justified with leading zeros.***

Air Intake/Wind Sensor/Sampler Height Above Ground - Enter the height, in meters, of the probe (air intake of wind sensor) or sampler above the ground. This entry must be right-justified with leading zeros.***

Horizontal Distance of Air Intake/Wind Sensor/Sampler from Nearest Street - Enter the horizontal distance, in meters, of the probe or sampler from the nearest street. This entry must be right-justified with leading zeros.***

Distance of the Air Intake/Wind Sensor/Sampler Above/Below Roof Level - If located on a building, enter the distance, in meters, of the air intake, wind sensor, or sampler above or below the roof line. If the air intake, wind sensor, or sampler is below the roof of the building but not on the ground, enter a "2" in the box labeled "ABOVE/BELOW". If the air intake, wind sensor, or sampler is located on the ground or above the roof line, leave the box labeled "ABOVE/BELOW" blank. In all cases, the location of the air intake, wind sensor, or sampler must pass the Obstruction Test as defined later under "Obstruction Test". If found to be obstructed, the appropriate entries must be made on the report. This entry must be right-justified with leading zeros.***

Direction of Nearest Street from AIR Intake/ Sampler - Enter an "X" in the box next to the direction of the nearest street from the air intake or sampler. In the case where the air intake or sampler has streets which are equally distant in two directions (i.e., one street to the north and one to the west), give the direction of the most heavily traveled street.

Obstruction Test - If the air intake, wind sensor, or sampler is obstructed as defined below*, enter the type of obstruction, direction, and distance (in meters) as indicated.

CONTINUOUS SAMPLING AND TAPE SAMPLER:

All numerical entries in this section must be right justified with leading zeros.***

Probe Inside Diameter - Enter, in millimeters, the inside diameter of the probe.

Probe Air Flowrate - Enter, in liters per minute, the flowrate of the sample air in the probe.

Total Probe Length - Enter, in meters, the length of the probe from the air intake to the distribution manifold or instrument inlet.

Air Sample Residence Time - Enter, in seconds, the residence time of the air sample in the probe taken from the air intake to the distribution manifold or instrument inlet (see calculation formula on next page).

Distance of Air Intake from Wall - If the air intake is below the roof line and extends out from a building, enter the horizontal distance, in meters, of the air intake from the wall. If the air intake does not extend from the side of a building but is below the roof line of the building, apply the obstruction test, and record-identifying information noted above.

How Many Instruments Sample from this Probe - Enter the number of continuous air monitoring instruments which draw their sample air from this probe.

If More than One Instrument, Is a Distribution Manifold Used? - Enter an "X" in the appropriate box. If the Yes box is checked, fill in both the "Distribution Manifold Diameter" and the "Distribution Manifold Length" as indicated below.

Distribution Manifold Inside Diameter - Inside diameter, of main run, enter diameter in millimeters.

Distribution Manifold Length - Enter the length, in meters, of the main run of the distribution manifold.

Orientation of Air Intake - Enter an "X" in the box next to the item that best describes the orientation of the air intake.

Probe Material - Enter an "X" in the box that identifies the composition of the probe. If the "Other" box is checked, specify the probe material in the space provided. Note that the only acceptable sampling probe material is borosilicate glass or FEP Teflon (40 CFR Part 58, Appendix E).

Distribution Manifold Material - Enter an "X" in the box that best describes the material the distribution manifold is made of. If no distribution manifold is used, do not check any boxes. If the "Other" box is checked, specify the probe material in the space provided.

CALCULATION OF TOTAL RESIDENCE TIME:

Total residence time is a sum of the probe, manifold, and manifold to instrument residence times.

Probe - Probe residence time in seconds (sec) equals the cross-sectional area of the probe in square millimeters (mm) times the total length of probe in meters (m) divided by the total flow rate in liters per minute (lpm), and is given by the formula shown below:

Manifold - Manifold residence time in seconds (sec) equals the cross-sectional area of the manifold in square millimeters (mm) times the total length of the manifold in meters (m) divided by the total flow rate in liters per minute (lpm), and is given by the formula shown below:

Manifold to Instrument - Manifold to instrument residence time in seconds (sec) equals the cross-sectional are of the manifold in square millimeters (mm) times the total length of the tubing from the manifold to each instrument in meters (m) divided by the flow rate in liters per minute (lpm) for the instrument, and is given by the formula shown below:

$$t = (\pi(d)^2 \times L \times .015) / Q$$

where
- t = residence time, sec.
- π = 3.14 etc.
- d = probe or manifold inside diameter, mm
- L = probe or manifold length, m
- Q = flow rate, 1/m
- .015 = conversion factor

or $t = 1.0677 \times L/Q$ for 3/16" ID or 4.76 mm diameter
and $t = 1.9002 \times L/Q$ for ¼" ID or 6.35 mm diameter
and $t = 7.6008 \times L/Q$ for ½" ID or 12.7 mm diameter

*An air intake, wind sensor or sampler is obstructed if an imaginary line extended 30^o up from the horizontal and rotated 360^o intersects any obstruction within 30 meters.

**Each time a Probe/Sampler Identification Report is submitted, include a dimensioned schematic showing: a) the configuration of each probe and distribution manifold; b) the location of each individual sampler; c) the "Probe/Sampler Identification Code" assigned to each probe or sampler; d) the pollutants sampled from each probe or sampler; and e) obstructions which fall within the constraints of the obstruction test.

***If less than five digits enter the values in the rightmost boxes, filling the remaining boxes with zeros.

NOTE: ARB requires a sample residence time of ten seconds or less for all SLAMS or NAMS. Also, the Probe/Sampler Report worksheet is currently being revised to include the calculation of the manifold residence time and the manifold to instrument residence time. The residence time should always be calculated

2.0.3.6 INSTRUCTIONS FOR COMPLETING THE POLLUTANT/PROJECT IDENTIFICATION REPORT

This report must be submitted whenever the project, agency pollutant, collection/analysis method, reporting units, instrument number, or the probe/sampler identification code starts or changes for any air monitoring activity at a site. When completing a new report, only fill in the requested information in the section entitled "To Be Completed By the Reporting Agency" (Right side).

When submitting changes to an existing air monitoring activity, complete only the "Site Identification Code", and "Site Name", (as assigned by the ARB) in the section entitled "For ARB use only" and the specific changes on the right side. Any other information entered on the form will be treated as changes to the originally submitted report.

Tables and additional guidelines for coding and submitting air quality data to the California Air Resources Board's (ARB) Aerometric Data System can be found in the ARB publication "User's Manual: California Aerometric Data System".

HEADING:

In the space provided on the top of the report, enter your name and the date. Indicate by an "X" in the appropriate block whether this is a new submittal or a revision to a previously submitted Pollutant/Project Identification Report.

PROJECT IDENTIFICATION SECTION:

Purpose of Sampling - Enter the purpose for the pollutant monitoring (abbreviate) described later in this report. If there is more than one project at a site, separate reports must be submitted. For example: The ARB is conducting parallel monitoring for ozone with an APCD. Two reports must be submitted: one describing the ARB's project as a special study and another describing the APCD's project as ambient monitoring.

Site Name - Enter the ARB assigned site name as designated on the Site Identification Report submitted for the site. The sampling site information must be exactly the same as that presented on the Site Identification Report.

Site Address - Enter the address of the site (number, street, city) as shown on the Site Identification Report submitted for the site.

Site Location - Enter the names of the Air Basin and county in which the site is located.

Agency Responsible for Data Submittal - Enter the name of the agency responsible for collecting and submitting the data to the ARB.

POLLUTANT SAMPLING INFORMATION SECTIONS (SPACE PROVIDED FOR TWO POLLUTANTS):

Pollutant Sampled - Enter the name of the pollutant being monitored as part of the project described under "Purpose of Sampling" (i.e., Sulfur Dioxide (SO_2), Oxidant (O_x)).

Collection/Analysis Method - Enter the sampling method used to monitor the pollutant described under, "Pollutant Sampled" (i.e., chemiluminescent, pulsed fluorescence, flame photometry, etc.).

Reporting Units - Enter the units (ppm, pphm, ug/m^3, etc.) in which the data is to be reported.

Instrument Manufacturer - Enter the name of the manufacturer of the air monitoring instrument (abbreviate).

Model No. - Enter the manufacturer's model number for the air monitoring instrument.

Sampling Period - Enter either the initiate or terminate data for monitoring of the pollutant described under "Pollutant Sampled". The entries must be right-justified with leading zeros. If any of the entries made previously in this section change, a revised report must be submitted. The revised report should: 1) terminate monitoring of the pollutant under the characteristics in existence prior to the change, and 2) initiate monitoring of the pollutant under the new characteristics established as a result of the change.

Instrument Property Number - Enter the last five digits of the air monitoring instrument property number. If the property number contains less than five digits, values must be right-justified with leading zeros.*

Probe/Sampler Identification Code - Enter the Probe/Sampler Identification Code assigned to the probe or sampler used in monitoring the pollutant described under “Pollutant Sampled” and indicated on the Probe/Sampler Identification Report. Each air monitoring instrument (and pollutant) at a site is referenced to a probe or to an individual sampler by this code. If an identification code changed due to relocation or alteration of the characteristics of a probe or sampler at a site, a revised pollutant/project identification report must be submitted. This report should terminate the operation of the instrument under the old code and initiate its operation under the new code.

*If less than five digits, enter the values in the rightmost boxes, filling the remaining boxes with zeros.

2.0.3.7 CERTIFICATE OF ANALYSIS

A Certificate of Analysis is required for all cylinders (except hydrogen) to track their location. The destination of each cylinder is entered on the top (white) section of the Certificate of Analysis form when the cylinder is shipped. The "Return Information" section (bottom) of the form is completed on the hard copy by field air monitoring personnel when the cylinder is returned to the lab. Figure 2.0.3.4 is an example of a properly completed Certificate of Analysis.

CALIFORNIA AIR RESOURCES BOARD
Technical Services Div., EDP Management
P.O. Box 2815 Sacramento, CA 95812
SITE IDENTIFICATION REPORT

ATTACH AN 8½" x 11" PORTION OF A U.S. GEOLOGICAL SURVEY (OR LOCAL STREET) MAP INDICATING SITE LOCATION. INCLUDE PHOTOGRAPHS OF THE FOUR QUADRANTS SURROUNDING THE SITE.

REPORT COMPLETED BY: | DATE | THIS REPORT IS ☐ FOR A NEW SITE ☐ AMENDS A PREVIOUS REPORT

FOR ARB USE ONLY

ACTION | CARD ID | SITE NAME (ARB Assigned)

SITE NUMBER
COUNTY | TYPE | SITE

BASIN CODE | RESPONSIBLE AGENCY CODE

TO BE COMPLETED BY REPORTING AGENCY

AGENCY RESPONSIBLE FOR SITE

SITE LOCATION (AIR BASIN, | COUNTY)

GEOGRAPHICAL COORDINATES (ENTER LONGITUDE & LATITUDE OR UTM COORD.)

LONGITUDE DEG. MIN. SEC. | LATITUDE DEG. MIN. SEC.

UTM ZONE | EASTING COORD. (METERS) | NORTHING COORD. (METERS)

ACTION | CARD ID
PUNCH COL. 3–9 AS SHOWN ABOVE

SITE ENVIRONMENT | SITE TRAFFIC

ELEV. ABOVE GND.

ELEV. ABOVE MSL | TEMP. CONTROL

CHECK ONE ITEM IN EACH CATEGORY THAT PERTAINS TO THE SAMPLING SITE.

LOCATION
☐ 1. CENTER CITY ☐ 2. SUBURBAN ☐ 3. RURAL ☐ 4. REMOTE

DOMINATING INFLUENCE
☐ 1. INDUSTRIAL ☐ 2. RESIDENTIAL ☐ 3. COMMERCIAL ☐ 4. VEHICULAR
☐ 5. NEAR URBAN ☐ 6. AGRICULTURAL ☐ 7. RECREATIONAL AREA ☐ 8. OTHER (SPECIFY IN COMMENTS)

TRAFFIC TYPE
☐ 1. RESIDENTIAL ☐ 2. INDUSTRIAL ☐ 3. FREEWAY ☐ 4. ARTERIAL
☐ 5. COMMERCIAL ☐ 6. OTHER (SPECIFY IN COMMENTS)

EST. TRAFFIC VOLUME ON NEAREST STREET (VEH./DAY) | EST. CITY POPULATION

IS THE AREA WHERE AIR MONITORING INSTRUMENTS ARE LOCATED TEMPERATURE CONTROLLED AT 25° C ± 5° C? ☐ 1. YES ☐ 2. NO

ELEVATION OF SITE (INSTRUMENTS) ABOVE GROUND (METERS) | ELEVATION OF GROUND ABOVE MEAN SEA LEVEL (METERS)

ACTION | CARD ID
PUNCH COL. 3–9 AS SHOWN ABOVE

SITE ADDRESS: (NUMBER, | STREET (13–34)

CITY (35–47) | STATE (48–49)) | (50–54) ZIP CODE

ACTION | CARD ID
PUNCH COL. 3–9 AS SHOWN ABOVE

(13–72) COMMENTS (ENTER COMMENTS THAT WILL HELP IDENTIFY THE SITE SUCH AS LANDMARKS, TERRAIN FEATURES, ETC.)

ACTION | CARD ID
PUNCH COL. 3–9 AS SHOWN ABOVE

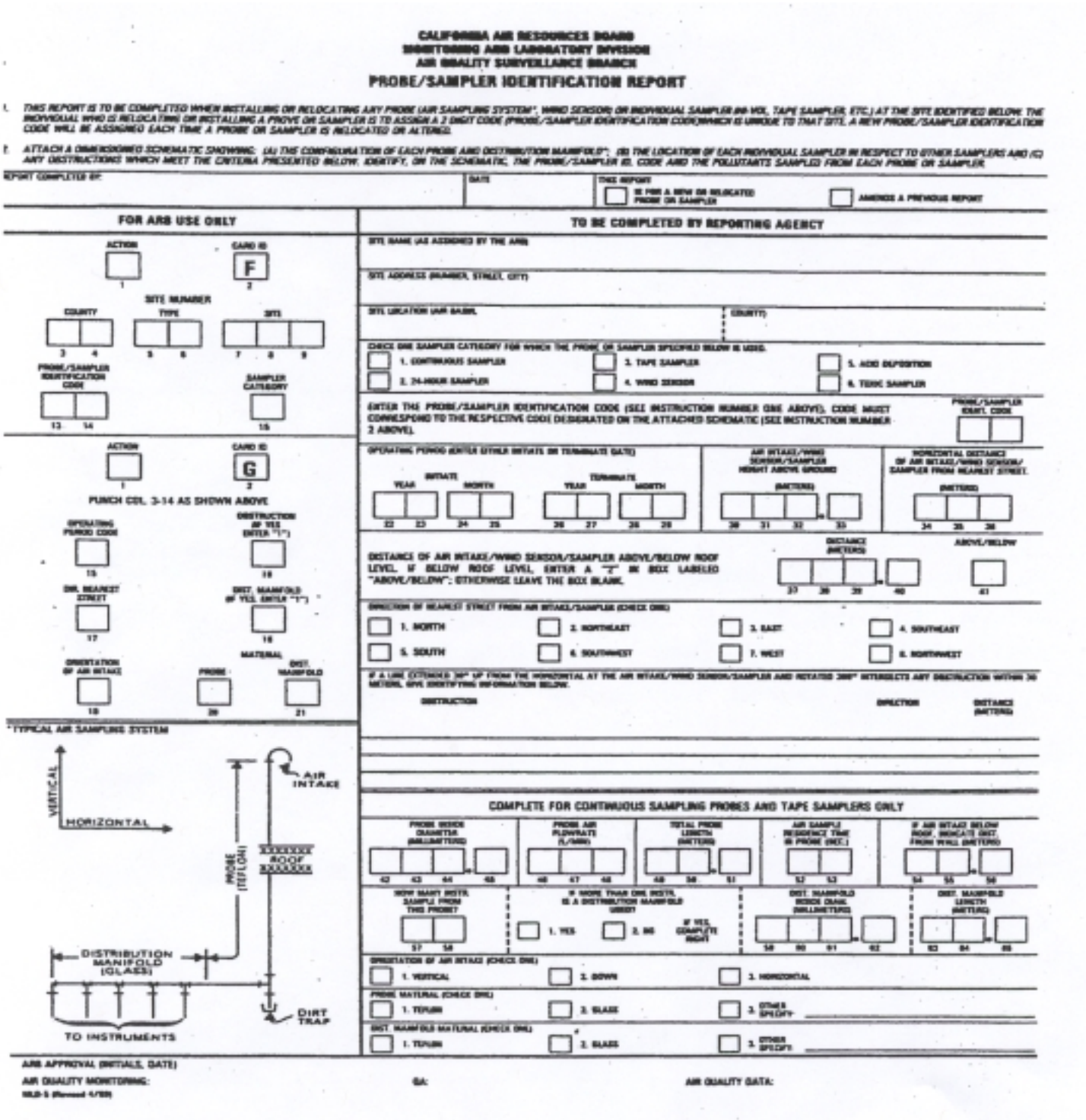
(13–72)

ARB APPROVAL (INITIALS, DATE)
AIR MONITORING: | AIR ANALYSIS:

ARB PROCESSING (INITIALS, DATE)
RECEIVED: | LOGGED:

TSD-4 (REVISED 11/77)

Figure 2.0.3.1a
Site Report



CALIFORNIA AIR RESOURCES BOARD
MONITORING AND LABORATORY DIVISION
AIR QUALITY SURVEILLANCE BRANCH

PROBE/SAMPLER IDENTIFICATION REPORT

1. THIS REPORT IS TO BE COMPLETED WHEN INSTALLING OR RELOCATING ANY PROBE (AIR SAMPLING SYSTEM*, WIND SENSOR) OR INDIVIDUAL SAMPLER (HI-VOL, TAPE SAMPLER, ETC.) AT THE SITE IDENTIFIED BELOW. THE INDIVIDUAL WHO IS RELOCATING OR INSTALLING A PROVE OR SAMPLER IS TO ASSIGN A 2 DIGIT CODE (PROBE/SAMPLER IDENTIFICATION CODE)WHICH IS UNIQUE TO THAT SITE. A NEW PROBE/SAMPLER IDENTIFICATION CODE WILL BE ASSIGNED EACH TIME A PROBE OR SAMPLER IS RELOCATED OR ALTERED.

2. ATTACH A DIMENSIONED SCHEMATIC SHOWING: (A) THE CONFIGURATION OF EACH PROBE AND DISTRIBUTION MANIFOLD*; (B) THE LOCATION OF EACH INDIVIDUAL SAMPLER IN RESPECT TO OTHER SAMPLERS AND (C) ANY OBSTRUCTIONS WHICH MEET THE CRITERIA PRESENTED BELOW. IDENTIFY, ON THE SCHEMATIC, THE PROBE/SAMPLER ID. CODE AND THE POLLUTANTS SAMPLED FROM EACH PROBE OR SAMPLER.

REPORT COMPLETED BY: | DATE | THIS REPORT: ☐ IS FOR A NEW OR RELOCATED PROBE OR SAMPLER ☐ AMENDS A PREVIOUS REPORT

FOR ARB USE ONLY

ACTION (1) | CARD ID (2): F

SITE NUMBER: COUNTY (3-4) | TYPE (5-6) | SITE (7-8-9)

PROBE/SAMPLER IDENTIFICATION CODE (13-14) | SAMPLER CATEGORY (15)

ACTION (1) | CARD ID (2): G

PUNCH COL. 3-14 AS SHOWN ABOVE

OPERATING PERIOD CODE (15) | OBSTRUCTION (IF YES ENTER "1") (16)

DIR. NEAREST STREET (17) | DIST. MANIFOLD (IF YES, ENTER "1") (18)

ORIENTATION OF AIR INTAKE (19) | MATERIAL: PROBE (20) | DIST. MANIFOLD (21)

*TYPICAL AIR SAMPLING SYSTEM

TO BE COMPLETED BY REPORTING AGENCY

SITE NAME (AS ASSIGNED BY THE ARB)

SITE ADDRESS (NUMBER, STREET, CITY)

SITE LOCATION (AIR BASIN) | (COUNTY)

CHECK ONE SAMPLER CATEGORY FOR WHICH THE PROBE OR SAMPLER SPECIFIED BELOW IS USED.
☐ 1. CONTINUOUS SAMPLER ☐ 2. 24-HOUR SAMPLER ☐ 3. TAPE SAMPLER ☐ 4. WIND SENSOR ☐ 5. ACID DEPOSITION ☐ 6. TOXIC SAMPLER

ENTER THE PROBE/SAMPLER IDENTIFICATION CODE (SEE INSTRUCTION NUMBER ONE ABOVE). CODE MUST CORRESPOND TO THE RESPECTIVE CODE DESIGNATED ON THE ATTACHED SCHEMATIC (SEE INSTRUCTION NUMBER 2 ABOVE). | PROBE/SAMPLER IDENT. CODE

OPERATING PERIOD (ENTER EITHER INITIATE OR TERMINATE DATE)
INITIATE: YEAR (22-23) MONTH (24-25)
TERMINATE: YEAR (26-27) MONTH (28-29)

AIR INTAKE/WIND SENSOR/SAMPLER HEIGHT ABOVE GROUND (METERS) (30-31-32-33)

HORIZONTAL DISTANCE OF AIR INTAKE/WIND SENSOR/SAMPLER FROM NEAREST STREET (METERS) (34-35-36)

DISTANCE OF AIR INTAKE/WIND SENSOR/SAMPLER ABOVE/BELOW ROOF LEVEL. IF BELOW ROOF LEVEL, ENTER A "2" IN BOX LABELED "ABOVE/BELOW"; OTHERWISE LEAVE THE BOX BLANK.
DISTANCE (METERS) (37-38-39-40) | ABOVE/BELOW (41)

DIRECTION OF NEAREST STREET FROM AIR INTAKE/SAMPLER (CHECK ONE)
☐ 1. NORTH ☐ 2. NORTHEAST ☐ 3. EAST ☐ 4. SOUTHEAST
☐ 5. SOUTH ☐ 6. SOUTHWEST ☐ 7. WEST ☐ 8. NORTHWEST

IF A LINE (EXTENDED 30M UP FROM THE HORIZONTAL AT THE AIR INTAKE/WIND SENSOR/SAMPLER AND ROTATED 360° INTERSECTS ANY OBSTRUCTION WITHIN 30 METERS, GIVE IDENTIFYING INFORMATION BELOW.

OBSTRUCTION | DIRECTION | DISTANCE (METERS)

COMPLETE FOR CONTINUOUS SAMPLING PROBES AND TAPE SAMPLERS ONLY

PROBE INSIDE DIAMETER (MILLIMETERS) (42-43-44-45) | PROBE AIR FLOWRATE (L/MIN) (46-47-48) | TOTAL PROBE LENGTH (METERS) (49-50-51) | AIR SAMPLE RESIDENCE TIME IN PROBE (SEC.) (52-53) | IF AIR INTAKE BELOW ROOF, INDICATE DIST. FROM WALL (METERS) (54-55-56)

HOW MANY INSTR. SAMPLE FROM THIS PROBE? (57-58)

IF MORE THAN ONE INSTR. IS A DISTRIBUTION MANIFOLD USED? ☐ 1. YES ☐ 2. NO — IF YES, COMPLETE RIGHT

DIST. MANIFOLD INSIDE DIAM. (MILLIMETERS) (59-60-61-62)

DIST. MANIFOLD LENGTH (METERS) (63-64-65)

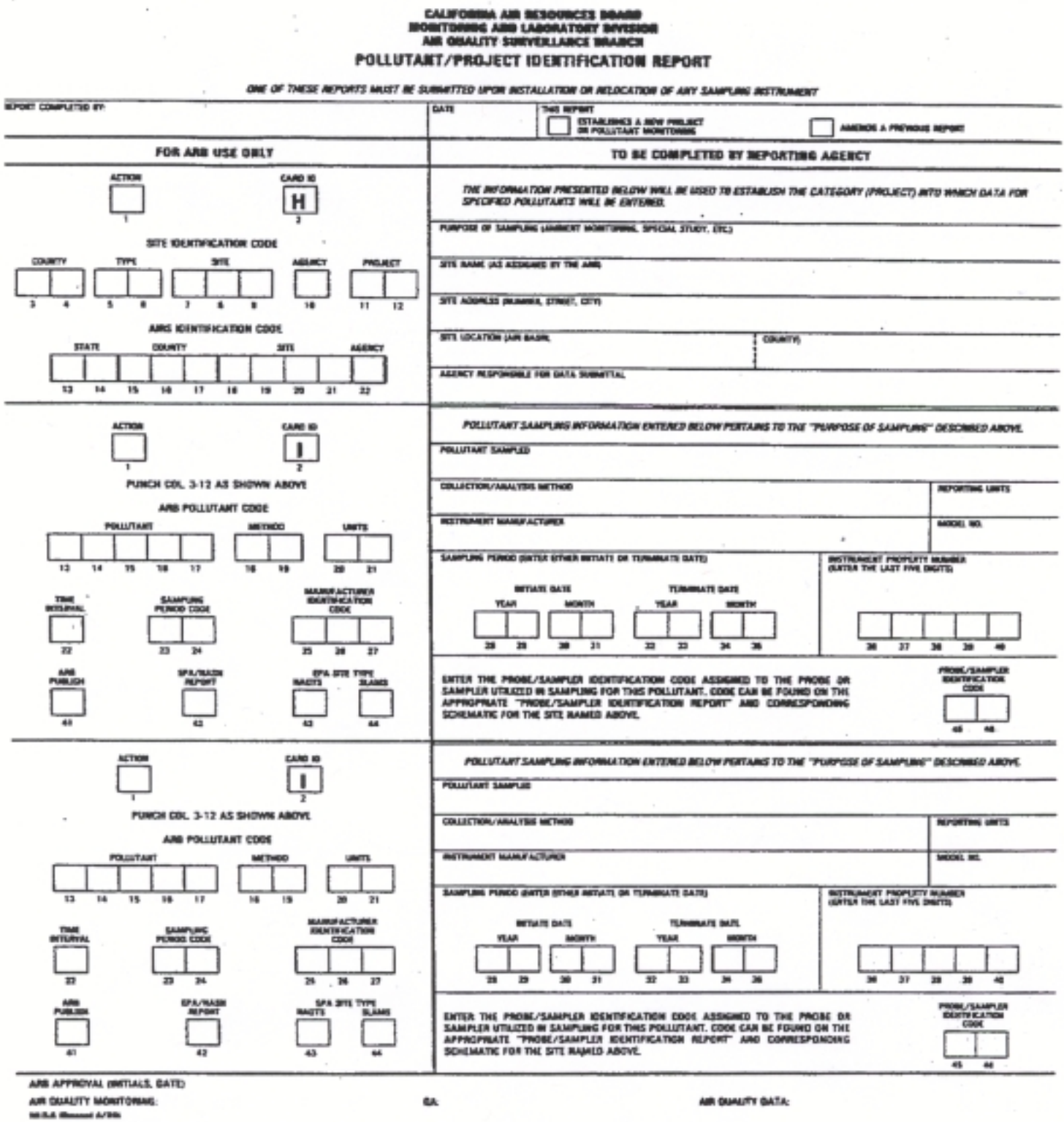
ORIENTATION OF AIR INTAKE (CHECK ONE)
☐ 1. VERTICAL ☐ 2. DOWN ☐ 3. HORIZONTAL

PROBE MATERIAL (CHECK ONE)
☐ 1. TEFLON ☐ 2. GLASS ☐ 3. OTHER SPECIFY: _____

DIST. MANIFOLD MATERIAL (CHECK ONE)
☐ 1. TEFLON ☐ 2. GLASS ☐ 3. OTHER SPECIFY: _____

ARB APPROVAL (INITIALS, DATE)
AIR QUALITY MONITORING: | QA: | AIR QUALITY DATA:
MLD-5 (Revised 4/98)

Figure 2.0.3.1b
Probe/Sampler Identification Report



CALIFORNIA AIR RESOURCES BOARD
MONITORING AND LABORATORY DIVISION
AIR QUALITY SURVEILLANCE BRANCH

POLLUTANT/PROJECT IDENTIFICATION REPORT

ONE OF THESE REPORTS MUST BE SUBMITTED UPON INSTALLATION OR RELOCATION OF ANY SAMPLING INSTRUMENT

REPORT COMPLETED BY: | DATE | THIS REPORT: ☐ ESTABLISHES A NEW PROJECT OR POLLUTANT MONITORING ☐ AMENDS A PREVIOUS REPORT

FOR ARB USE ONLY

ACTION (1) | CARD ID (2): H

SITE IDENTIFICATION CODE
COUNTY (3-4) | TYPE (5-6) | SITE (7-9) | AGENCY (10) | PROJECT (11-12)

ARB IDENTIFICATION CODE
STATE (13-14) | COUNTY (15-18) | SITE (19-21) | AGENCY (22)

TO BE COMPLETED BY REPORTING AGENCY

THE INFORMATION PRESENTED BELOW WILL BE USED TO ESTABLISH THE CATEGORY (PROJECT) INTO WHICH DATA FOR SPECIFIED POLLUTANTS WILL BE ENTERED.

PURPOSE OF SAMPLING (AMBIENT MONITORING, SPECIAL STUDY, ETC.)

SITE NAME (AS ASSIGNED BY THE ARB)

SITE ADDRESS (NUMBER, STREET, CITY)

SITE LOCATION (AIR BASIN) | COUNTY)

AGENCY RESPONSIBLE FOR DATA SUBMITTAL

ACTION (1) | CARD ID (2): I

PUNCH COL 3-12 AS SHOWN ABOVE

ARB POLLUTANT CODE
POLLUTANT (13-17) | METHOD (18-19) | UNITS (20-21)
TIME INTERVAL (22) | SAMPLING PERIOD CODE (23-24) | MANUFACTURER IDENTIFICATION CODE (25-27)
ARB PUBLISH (41) | EPA/RADIN REPORT (42) | EPA SITE TYPE: RADTS (43) | SLAMS (44)

POLLUTANT SAMPLING INFORMATION ENTERED BELOW PERTAINS TO THE "PURPOSE OF SAMPLING" DESCRIBED ABOVE.

POLLUTANT SAMPLED

COLLECTION/ANALYSIS METHOD | REPORTING UNITS

INSTRUMENT MANUFACTURER | MODEL NO.

SAMPLING PERIOD (ENTER EITHER INITIATE OR TERMINATE DATE)
INITIATE DATE: YEAR (28-29) MONTH (30-31)
TERMINATE DATE: YEAR (32-33) MONTH (34-36)

INSTRUMENT PROPERTY NUMBER (ENTER THE LAST FIVE DIGITS) (36-40)

ENTER THE PROBE/SAMPLER IDENTIFICATION CODE ASSIGNED TO THE PROBE OR SAMPLER UTILIZED IN SAMPLING FOR THIS POLLUTANT. CODE CAN BE FOUND ON THE APPROPRIATE "PROBE/SAMPLER IDENTIFICATION REPORT" AND CORRESPONDING SCHEMATIC FOR THE SITE NAMED ABOVE.

PROBE/SAMPLER IDENTIFICATION CODE (45-46)

ACTION (1) | CARD ID (2): I

PUNCH COL 3-12 AS SHOWN ABOVE

ARB POLLUTANT CODE
POLLUTANT (13-17) | METHOD (18-19) | UNITS (20-21)
TIME INTERVAL (22) | SAMPLING PERIOD CODE (23-24) | MANUFACTURER IDENTIFICATION CODE (25-27)
ARB PUBLISH (41) | EPA/RADIN REPORT (42) | EPA SITE TYPE: RADTS (43) | SLAMS (44)

POLLUTANT SAMPLING INFORMATION ENTERED BELOW PERTAINS TO THE "PURPOSE OF SAMPLING" DESCRIBED ABOVE.

POLLUTANT SAMPLED

COLLECTION/ANALYSIS METHOD | REPORTING UNITS

INSTRUMENT MANUFACTURER | MODEL NO.

SAMPLING PERIOD (ENTER EITHER INITIATE OR TERMINATE DATE)
INITIATE DATE: YEAR (28-29) MONTH (30-31)
TERMINATE DATE: YEAR (32-33) MONTH (34-36)

INSTRUMENT PROPERTY NUMBER (ENTER THE LAST FIVE DIGITS) (36-40)

ENTER THE PROBE/SAMPLER IDENTIFICATION CODE ASSIGNED TO THE PROBE OR SAMPLER UTILIZED IN SAMPLING FOR THIS POLLUTANT. CODE CAN BE FOUND ON THE APPROPRIATE "PROBE/SAMPLER IDENTIFICATION REPORT" AND CORRESPONDING SCHEMATIC FOR THE SITE NAMED ABOVE.

PROBE/SAMPLER IDENTIFICATION CODE (45-46)

ARB APPROVAL (INITIALS, DATE)

AIR QUALITY MONITORING: | QA: | AIR QUALITY DATA:

Figure 2.0.3.1c
Pollutant Project Identification Report

CALIFORNIA AIR RESOURCES BOARD
Monitoring & Laboratory Division
SITE INITIATION/TERMINATION REPORT

I. New site or parameters:

Provide reason(s) for establishing air monitoring site or initiating new parameters. Specify applicable federal or state standards, the objectives of the monitoring and expected duration of monitoring.

_____

_____

_____

II. INITIATION/TERMINATION DATES:
Begin Date:_____End Date:_____

III. Terminate site or parameters:

Provide reason for terminating air monitoring site or parameters.

_____

_____

_____

IV. Pollutant Information: (Check appropriate boxes)

	Spatial Scale					Monitoring Type			
Pollutants	Micro	Middle	Neighbhd	Urban	Regional	NAMS	SLAMS	SPM	PSD
O3									
CO									
NO2									
SO2									
PM10									
Lead									

V. Signature(s):

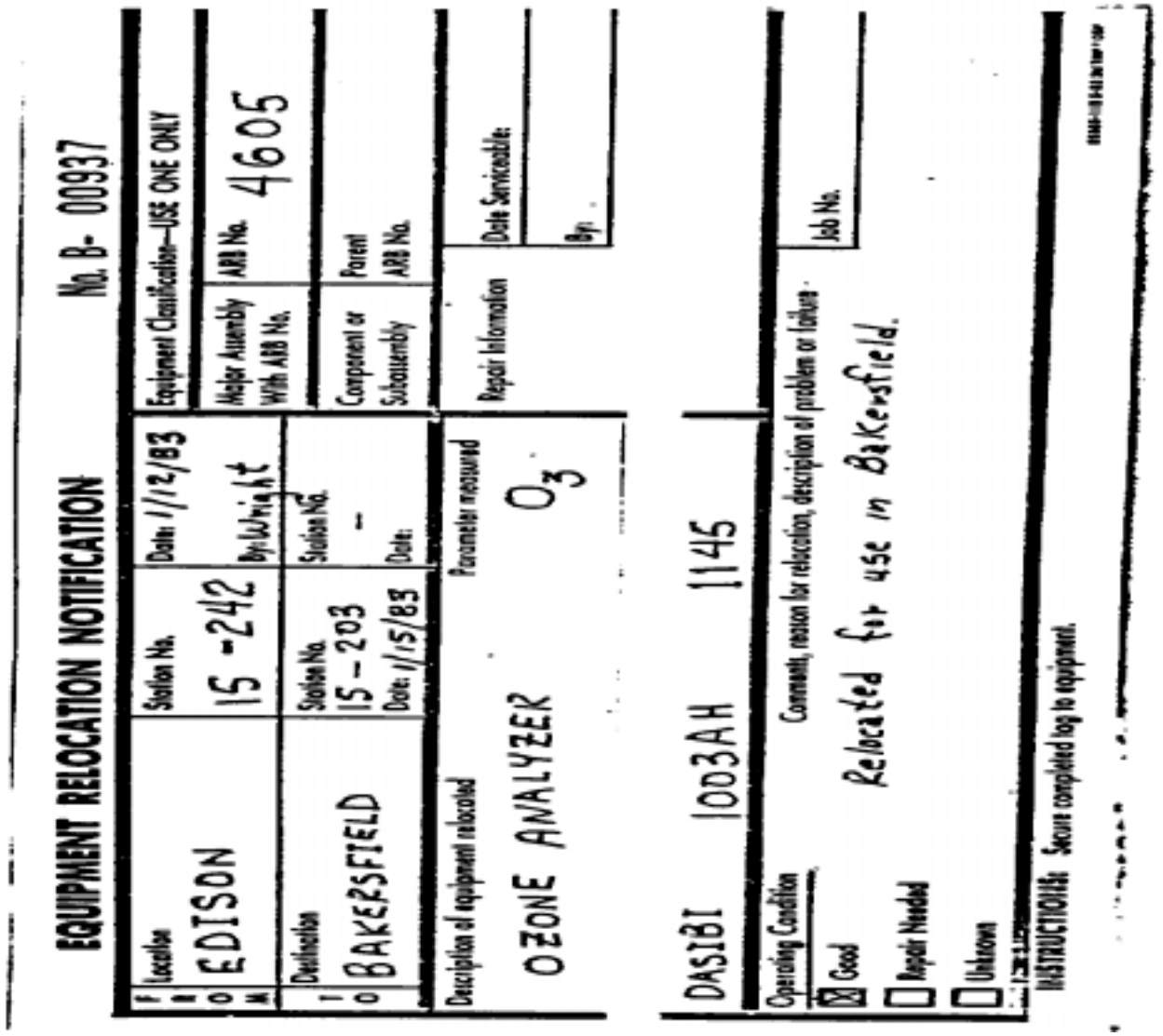
Prepared by:_____ Site Name:_____

Title: _____ Site Number:_____

Date: _____ Effective Date:_____

MLD-87 (01/91)

Figure 2.0.3.1d
Site Identification Report



EQUIPMENT RELOCATION NOTIFICATION

No. B- 00937

From Location: EDISON	Station No.: 15-242	Date: 1/12/83 By: Burright	Equipment Classification—USE ONE ONLY
To Destination: BAKERSFIELD	Station No.: 15-203 Date: 1/15/83	Station No.: -- Date:	Major Assembly With ARB No.: ARB No. 4605
			Component or Subassembly: Parent ARB No.

Description of equipment relocated: OZONE ANALYZER

Parameter measured: O_3

Repair Information: Date Serviceable: By:

DAS1BI 1003AH 1145

Operating Condition

☒ Good

☐ Repair Needed

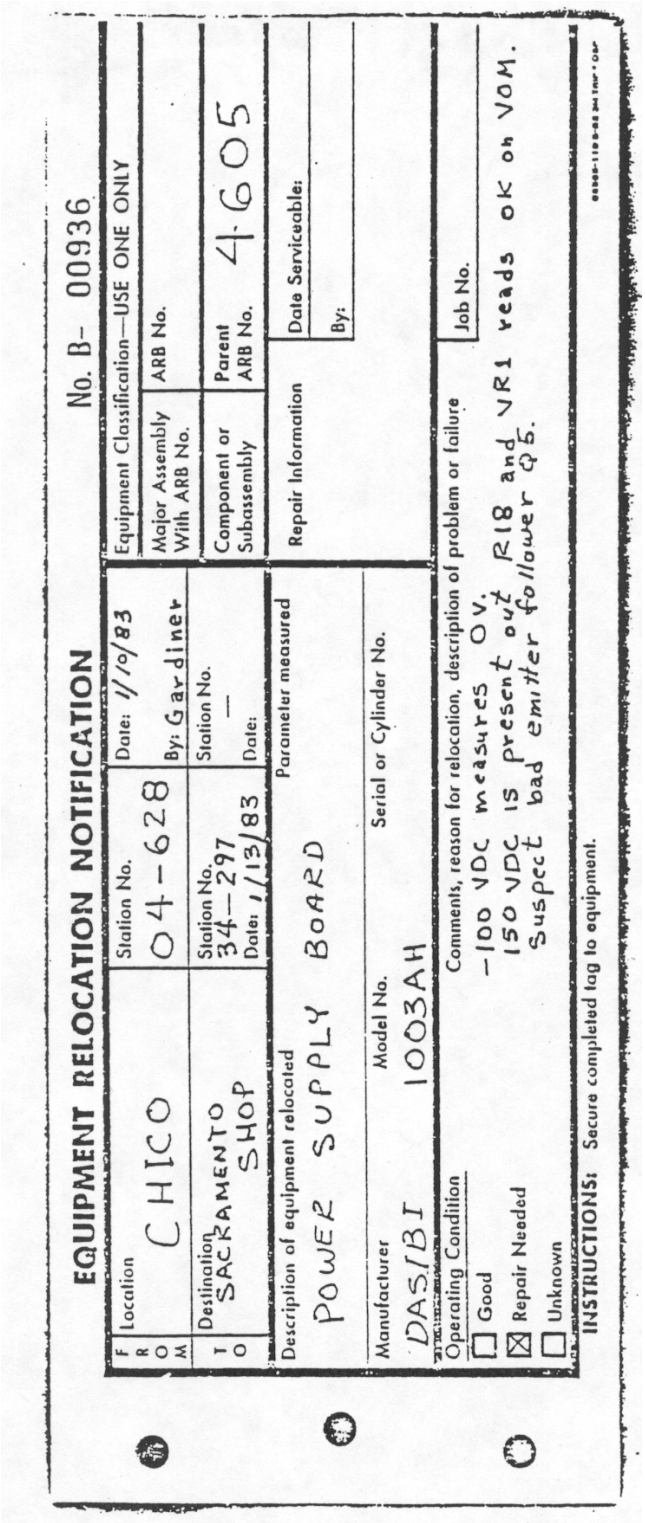
☐ Unknown

Comments, reason for relocation, description of problem or failure: Relocated for use in Bakersfield.

Job No.:

INSTRUCTIONS: Secure completed tag to equipment.

Figure 2.0.3.2
Relocation of Major Assemblies



EQUIPMENT RELOCATION NOTIFICATION

No. B- 00936

FROM: Location: CHICO | Station No.: 04-628 | Date: 1/10/83 By: Gardiner

TO: Destination: SACRAMENTO SHOP | Station No.: 34-297 Date: 1/13/83 | Station No.: — Date:

Equipment Classification—USE ONE ONLY

Major Assembly With ARB No.:

ARB No.:

Component or Subassembly:

Parent ARB No.: 4-6605

Description of equipment relocated: POWER SUPPLY BOARD

Parameter measured:

Repair Information:

Date Serviceable:

By:

Manufacturer: DASIBI

Model No.: 1003AH

Serial or Cylinder No.:

Operating Condition

☐ Good

☒ Repair Needed

☐ Unknown

Comments, reason for relocation, description of problem or failure:
-100 VDC measures OV.
150 VDC is present out R18 and VR1 reads ok on VOM.
Suspect bad emitter follower Q5.

Job No.:

INSTRUCTIONS: Secure completed tag to equipment.

Figure 2.0.3.3
Relocation of Components or Sub-assemblies

CERTIFICATE OF ANALYSIS

CALIFORNIA AIR RESOURCES BOARD
TECHNICAL SERVICES DIVISION

COMPRESSED GAS CYLINDER NUMBER: CC12817

ANALYSIS DATE: 1/21/82 CYLINDER PRESSURE: 1900

LOCATION: ARB (AGENCY) Modesto (SITE) 50-568 (SITE NO.)

CERTIFIED CONCENTRATION(S) OF: SB IN N_2

6166/6188 PPM OF CH_4/THC GAS

6289 PPM OF CO GAS

127.2 PPM OF NO GAS

62.2 PPM OF SO_2 GAS

CERTIFIED BY: Jack

THIS CERTIFICATION IS NOT VALID IF THE CYLINDER PRESSURE DROPS BELOW 300 PSIG OR AFTER 1/21/83 DATE

RETURN INFORMATION

REASON (✓) : EMPTY _____ RECERTIFICATION _____

OTHER _____

RETURN DATE: _____ CYLINDER PRESSURE: _____

67057-119 1 M DJP - CSP

Figure 2.0.3.4
Certificate of Analysis for Compressed Gas Cylinders